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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/775,760	02/09/2004	Erik B. Christensen	MS1-1863US	8719
22801	7590	09/06/2006	EXAMINER	
LEE & HAYES PLLC 421 W RIVERSIDE AVENUE SUITE 500 SPOKANE, WA 99201			PANNALA, SATHYANARAYA R	
			ART UNIT	PAPER NUMBER
			2164	

DATE MAILED: 09/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/775,760

Applicant(s)

CHRISTENSEN ET AL.

Examiner

Sathyanarayan Pannala

Art Unit

2164

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

PART I

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. I. Claims 1-15, the independent claims 1 and 11 are claiming for a data structure handling process. All these claims are drawn to database generating database or data structure, classified in class 707, subclass 102.
 - II. Claims 16-21, the independent claim 16 is claiming for a computer readable storage medium with computer readable code to select a data structure handling vehicle. All these claims are drawn to database distributed or remote access, classified in class 707, subclass 10.
 - III. Claims 22-24, the independent claim 22 is claiming for an apparatus of a computer based product. All these claims are drawn to database archiving or backup, classified in class 707, subclass 204.
2. The inventions are distinct, each from the other because of the following reasons:

Inventions I-III are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each

other if they are shown to be separately usable. In the instant application, each of the respective inventions have a separate utility as in a system not having the others. See MPEP ' 806.05(d).

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
4. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for any other group, restriction for examination purposes as indicated is proper.
5. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their recognized divergent subject matter, restriction for examination purposes as indicated is proper.
6. A telephone call was made to Mr. David Morasch (legal representative of the applicant) on August 24, 2006 to request an oral election to the above restriction requirement. The applicant responded by electing Group I, Claims 1-15 drawn to class 707, subclass 102 without traverse. On the basis of election, the case is examined and the report is in part II.
7. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship

must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(I).

PART II

DETAILED ACTION

1. Application# 10/775760 filed on 2/9/2004 has been examined considering the elected claims 1-15. In this Office Action, claims 1-15 are pending.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: element 535 see, specification page 11, paragraph [0036] is not shown in Fig. 5. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. Specification is objected to because of the following informalities: "transport" or "transport vehicle" words cannot be used in the claim as they deal with radio frequency. Otherwise amend the specification by eliminating the "radio frequency" and "wireless". Appropriate correction is required.
4. Specification is objected because use of terminology is non-standard or non-relevant. For example, "transport" or "transport vehicle" compared to streamed data protocol or buffering data protocol.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 1-15 are rejected under 35 U.S.C. § 101, because claims are directed to functional descriptive material consisting of data structures. Independent claims 1 and 11 are claiming a data structure per se. Data structure and program code fall under the category of functional descriptive material and they are nonstatutory when claimed as descriptive material per se. Warmerdam, 33 F.3d at 1360, 31 USPQ2d at 1759.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walker (US Patent 6,665,729) hereinafter Walker, and in view of Wookey et al. (USPA Pub. US 20040001514 A1) hereinafter Wookey.

9. As per independent claim 1, Walker teaches to compensate for limitations that arise when a transaction-based protocol is used together with stream based protocol, the stream-based protocol is modified to take advantages of certain characteristics of transaction-based protocols (col. 2, lines 50-54). Walker teaches the claimed, determining a size of a data structure (Fig. 3, col. 4, lines 50-54). Walker does not explicitly teach bulk data protocol. However, Wookey teaches the claimed, selecting a data streaming protocol when the size exceeds a predetermined limit (examiner interpreting data stream protocol as bulk data protocol) (page 20, paragraph [0297]). Thus, it would have been obvious to one of ordinary skill in the data processing art at the time of the invention, to have combined the teachings of the cited references because Wookey's teachings would have allowed Walker's method to eliminate the confusing issue of which services to use, why the services are different and to facilitate the user with a single integrated service by the service provider. (page 1, paragraph [0007]). Walker teaches the claimed, selecting a buffered data protocol otherwise (Fig. 3, col. 4, lines 50-67).

10. As per dependent claim 2, Walker teaches the claimed, selecting a buffered data protocol further comprising serializing one or more data structures into a data transmission unit terminating with a delimiting code (Fig. 3, col. 3, lines 56-59).

11. As per dependent claim 3, Walker teaches the claimed, selecting a buffered data protocol further comprising including an end of data indicator for denoting when a data transmission vehicle is no longer in use (Fig. 3, col. 4, lines 65-67).

12. As per dependent claim 4, Walker and Wookey combined teaches claim 1. Wookey teaches the claimed, selecting a data streaming protocol further comprising streaming the data structure by: streaming a header, streaming the data structure and streaming an acknowledge code (Fig. 12, page 8, paragraph [0123]).

13. As per dependent claim 5, Walker teaches the claimed, selecting a data streaming protocol further comprising streaming the data structure by buffering a first portion of the data structure and streaming a second portion of the data structure (Fig. 3, col. 3, lines 56-59).

14. As per dependent claim 6, Walker and Wookey combined teaches claim 1. Wookey teaches the claimed, selecting a data transmission vehicle from a pool of available data transmission vehicles (page 3, paragraph [0046]).

15. As per dependent claim 7, Walker and Wookey combined teaches claim 1. Wookey teaches the claimed, selecting a data transmission connection from a pool of available data transmission connections using round robin selection (Fig. 5, page 6, paragraph [0099]).

16. As per dependent claim 8, Walker teaches the claimed, formatting the data structure in accordance with at least one protocol chosen from a group consisting of:

simple mail transfer protocol, POP3, hyper text transfer protocol, file transfer protocol and transfer control protocol/Internet protocol (col. 5, line 4).

17. As per dependent claim 9, further comprising using a transport vehicle for data transmission chosen from a group consisting of: HTTP transport, TCP transport, InterProcess Transport, InProcess Transport, SMTP transport and POP3 Transport (col. 5, line 4).

18. As per dependent claim 10, Walker teaches the claimed, selecting a transmission scheme chosen from a group consisting of: HTTP, SOAP.TCP, NET.TCP, MS.SOAP.XPROC, NET.IPC, MS.SOAP.INPROC, NET.INAPPDOMAIN, SOAP.MAIL, NET.MAIL and POP (col. 5, line 4).

19. As per independent claim 11, Walker teaches to compensate for limitations that arise when a transaction-based protocol is used together with stream based protocol, the stream-based protocol is modified to take advantages of certain characteristics of transaction-based protocols (col. 2, lines 50-54). Walker teaches the claimed, determining a size of a data structure (Fig. 3, col. 4, lines 50-54). Walker does not explicitly teach bulk data protocol. However, Wookey teaches the claimed, selecting a data streaming protocol when the size exceeds a predetermined limit (examiner interpreting data stream protocol as bulk data protocol) (page 20, paragraph [0297]). Thus, it would have been obvious to one of ordinary skill in the data processing art at

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the time of the invention, to have combined the teachings of the cited references because Wookey's teachings would have allowed Walker's method to eliminate the confusing issue of which services to use, why the services are different and to facilitate the user with a single integrated service by the service provider. (page 1, paragraph [0007]). Walker teaches the claimed, selecting a buffered data protocol when the size does not exceed the predetermined limit (Fig. 3, col. 4, lines 50-67).

20. As per dependent claim 12, Walker teaches the claimed, the determining means further comparing the size to the predetermined limit (Fig. 3, col. 4, lines 50-54).

21. As per dependent claim 13, Walker and Wookey combined teaches claim 1. Wookey teaches the claimed, prefacing the data structure with addressing information means for denoting an end-of-message (Fig. 14, page 11-12, paragraph [0163] & [0176]).

22. As per dependent claim 14, Walker teaches the claimed, for exchanging information expressive of buffer size (col. 1, lines 57-61).


23. As per dependent claim 15, Walker teaches the claimed, buffering a first portion of the data structure and streaming a second portion of the data structure (Fig. 3, col. 3, lines 56-59).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sathyanarayan Pannala whose telephone number is (571) 272-4115. The examiner can normally be reached on 8:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Rones can be reached on (571) 272-4085. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Sathyanarayan Pannala
Examiner

srp
August 31, 2006